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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,921	04/14/2006	Holger Ratz	W1.2067 PCT-US	5460
7590 Douglas R. Hanscom Jones, Tullar & Cooper P.O. Box 2266 Eads Station Arlington, VA 22202			EXAMINER SEVERSON, JEREMY R	
			ART UNIT 3653	PAPER NUMBER
			MAIL DATE 09/15/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/575,921

**Applicant(s)**

RATZ, HOLGER

**Examiner**

Jeremy Severson

**Art Unit**

3653

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 29-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date 4/14/06
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim depends from a cancelled claim. For the purpose of expediting prosecution, the claim will be examined as if it depended from claim 29.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 29-34, 36 and 38-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang (US 4,120,491) in view of Rabinow (US 3,531,108) and Dobrindt (US 2002/0063378).

Regarding claim 29, Lang discloses a device for conveying a flow of flat object comprising: a conveying track having a plurality of spaced conveyor belts (3, 5) and adapted to receive a flow of flat objects to be conveyed in a conveying direction by said conveying belt; a plurality of rotatable paddle wheels 12 spaced sequentially along said conveying track in said conveying direction, each of said paddle wheels being adjacent said spaced conveyor belts; means 14 supporting each of said plurality of paddle

wheels for rotation about an axis of rotation; at least one paddle on each said paddle wheel and defining an object receiving compartment, a tip on each said paddle of each said paddle wheel, said tip being positioned to cross said conveying track while said compartment associated with said tip adjoins said conveying track and wherein said paddle wheels are rotated with respect to each other having a phase shift of said at least one compartment of each said paddle whereby a number of objects are received in respective ones of said compartments of said number of said sequentially arranged paddle wheels, and a deposit location 11 adapted to receive said flat objects from said paddle wheels. Lang lacks the explicit disclosure of a maximum number of paddles on each said paddle wheel being four; and said number of objects and paddle wheels being a whole number of at least three. Rabinow teaches the use of paddle wheels with two paddles, in order to deliver sheets. See, e.g., par. 4. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use paddle wheels with two paddles in the device of Lang, as taught by Rabinow, in order to deliver sheets. Dobrindt teaches the use of three paddle wheels, in order to form three stacks. Therefore, it would have been obvious to one of ordinary skill in the art to use three paddle wheels in the device of Lang, as taught by Dobrindt, in order to form three stacks. Further, mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Regarding claim 30, the apparatus of Lang as modified by Rabinow and Dobrindt comprises the device of claim 29 wherein said paddle wheels are located below said conveying track. See Lang, fig. 1.

Regarding claim 31, the apparatus of Lang as modified by Rabinow and Dobrindt comprises the device of claim 29 wherein said conveying belt has a conveying speed and said paddle wheels have a circumferential speed which is less than said conveying speed.

Regarding claim 32, the apparatus of Lang as modified by Rabinow and Dobrindt comprises the device of claim 29 wherein each of said paddle wheels has less than three paddles. See Dobrindt, fig. 3.

Regarding claim 33, the apparatus of Lang as modified by Rabinow and Dobrindt comprises the device of claim 29 wherein adjacent ones of said sequentially spaced paddle wheels have said phase shift with respect to each other defined by  $2 \cdot \pi \cdot (d/vT + 1/mN)$  wherein: d is a spacing distance between said paddle wheels; m is said number of paddles, N is said number of paddle wheels; v is a conveying speed of said conveying belt; and T is a time interval between successive ones of said objects on said conveying belt.

Regarding claim 34, the apparatus of Lang as modified by Rabinow and Dobrindt comprises everything except wherein said number of paddles is four. It would have been obvious to one of ordinary skill in the art at the time of the invention to add two paddles to the paddle wheel of Dobrindt, in order to have the paddles align with the delivery end at a greater rate, and mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Regarding claim 36, the apparatus of Lang as modified by Rabinow and Dobrindt comprises the device of claim 29 wherein said conveying track has a horizontal section, said plurality of paddle wheels being spaced along said horizontal section of said conveying track. See Lang, fig. 3.

Regarding claim 38, the apparatus of Lang as modified by Rabinow and Dobrindt comprises the device of claim 29 wherein a section of said conveying track is arranged between each two of said plurality of sequentially spaced paddle wheels. See Lang, fig. 3.

Regarding claim 39, the apparatus of Lang as modified by Rabinow and Dobrindt comprises the device of claim 29 wherein said plurality of paddle wheels are arranged on one side of said conveying track. See Lang, fig. 3.

Regarding claim 40, the apparatus of Lang as modified by Rabinow and Dobrindt comprises the device of claim 29 wherein first identical ones of said objects are secured in a first one of said paddle wheels, and second identical ones of said objects, different from said first objects, are secured in a second one of said paddle wheels.

Regarding claim 41, the apparatus of Lang as modified by Rabinow and Dobrindt comprises the device of claim 40 further wherein third identical objects, different from said first and second objects, are received in a third one of said paddle wheels.

Regarding claim 42, the apparatus of Lang as modified by Rabinow and Dobrindt comprises the device of claim 41 further wherein fourth identical objects, different from said first, second and third objects, are received in a fourth one of said paddle wheels.

Regarding claim 43, the apparatus of Lang as modified by Rabinow and Dobrindt comprises the device of claim 29 wherein said axes of rotation of said plurality of paddle wheels are arranged on one level. See Lang, fig. 3.

Regarding claim 44, the apparatus of Lang as modified by Rabinow and Dobrindt comprises the device of claim 29 wherein said objects are printed products.

Claims 35, 37 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang in view of Rabinow, Dobrindt and Weiler (US 6,941,862).

Regarding claim 35, the apparatus of Lang as modified by Rabinow and Dobrindt comprises everything except a transverse cutting device located before, in a direction of travel of said objects, said conveying belt. Weiler teaches the use of a transverse cutting device 8 in order to cut a web into signatures. See col. 4, lines 16 et seq. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add a transverse cutting device located before, in a direction of travel of said objects, said conveying belt, to the apparatus of Lang as modified by Rabinow and Dobrindt, as taught by Weiler, in order to cut a web into signatures.

Regarding claim 37, the apparatus of Lang as modified by Rabinow, Dobrindt and Weiler comprises the device of claim 35 wherein said conveying track includes a vertical section (see Weiler, fig. 1), after, in said direction of travel of said objects, said transverse cutting device (Weiler, 8).

Regarding claim 45, the apparatus of Lang as modified by Rabinow and Dobrindt comprises everything except a folding blade cylinder adapted to transversely fold said

Art Unit: 3653

flat objects. Weiler teaches the use of a folding blade cylinder 2 adapted to transversely fold said flat objects, in order to form folded signatures. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add a folding blade cylinder adapted to transversely fold said flat objects to the device of Lang as modified by Rabinow and Dobrindt, as taught by Weiler, in order to form folded signatures.

Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lang in view of Rabinow, Dobrindt and Held (US 2003/0102616).

Regarding claim 46, the apparatus of Lang as modified by Rabinow and Dobrindt comprises everything except a collecting cylinder for said flat objects. Held teaches the use of a collecting cylinder 7 in order to form a stack of printed products. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add a collecting cylinder to the device of Lang as modified by Rabinow and Dobrindt, as taught by Held, in order to form a stack of printed products.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEREMY R. SEVERSON whose telephone number is (571)272-2209. The examiner can normally be reached on Monday through Friday.



Art Unit: 3653

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey, can be reached on 571-272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeremy Severson/  
Examiner, Art Unit 3653

/Patrick H. Mackey/  
Supervisory Patent Examiner, Art  
Unit 3653